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THE INFLUENCE OF TASK AND PERSONALITY CHARACTERISTICS ON EMPLOY--ETC(U)  
JAN 81 R T MONDAY, D G SPENCER, R M STEERS N00014-81-K-0026  
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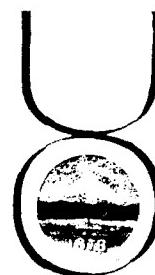
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The Influence of Task and Personality  
Characteristics on Employee Turnover and  
Absenteeism Incidents

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Technical Report No. 2

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20. Abstract (continued)

ment as job scope increased. The addition of a squared job scope term to each of the analyses significantly increased explained variance and thus suggests that relationships between job scope and employee withdrawal behaviors may be curvilinear.

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### Abstract

This study examined relationships among perceived job scope, employee need strengths, and turnover and absenteeism incidents among a sample of employees in state and county government. Perceived job scope was negatively related to both turnover and absenteeism. While the needs for achievement and autonomy were both found to have a direct relationship to turnover, job scope and both need strength measures interacted in influencing absenteeism. As predicted absenteeism decreased for employees with a high need for autonomy as job scope increased. Contrary to predictions, absenteeism increased for employees with a high need for achievement as job scope increased. The addition of a squared job scope term to each of the analyses significantly increased explained variance and thus suggests that relationships between job scope and employee withdrawal behaviors may be curvilinear.

## The Influence of Task and Personality Characteristics on Employee Turnover and Absenteeism Incidents

The impact of the motivational properties of tasks on employee attitudes and behaviors has received considerable attention in recent years. Steers and Mowday (1977) reviewed several theories of job design which predict that employees on high scope jobs (i.e., jobs high in skill variety, autonomy, task identity, task significance, and feedback) will report higher levels of job satisfaction and exhibit higher job performance and lower levels of turnover and absenteeism than comparable employees on low scope jobs. These predictions are particularly expected to hold for employees with high levels of higher-order or growth needs. Considerable evidence is available to support the relationship between perceived job scope and job satisfaction, although the extent to which this relationship is moderated by employee need strengths is open to question (White, 1978). Less evidence is available on the relationship between job scope and actual employee behaviors, particularly withdrawal behaviors (i.e., turnover and absenteeism). Investigations of such relationships would appear to provide an important test of job design theory since relationships between task characteristics and employee behaviors are free from the problem of common methods variance which generally plagues job perception-job attitude research.

The purpose of this study was to examine relationships between employee perceptions of their job and subsequent turnover and absenteeism incidents. Based on previous research, job scope would be expected to have a main effect on both turnover and absenteeism (Mobley, Griffeth, Hand & Meglino, 1979; Steers & Rhodes, 1978). A number of studies have found lower turnover and absenteeism among employees on jobs involving high responsibility, autonomy, and variety. In addition, several studies have been done which suggest that

employee personality characteristics are directly related to turnover behavior (Bernardin, 1977; Mowday, Porter & Stone, 1978). In addition to the main effects of task and personality characteristics on employee withdrawal behaviors, current job design theory (Hackman & Oldham, 1976) also predicts that task characteristics and employee personality will interact in relation to turnover and absenteeism. Several recent studies have examined these predicted interactions with equivocal results. Mowday, Stone and Porter (1979) found some support for the predicted interaction in a study of turnover behavior while Katerberg, Hom and Hulin (1978) failed to support this prediction. In addition, Hackman and Oldham (1976) found no difference in the relationship between task characteristics and absenteeism for employees with low vs. high growth need strength.

In most previous research on job design it has been assumed that the relationship between job scope and employee attitudes and behavior is linear. Recent research by Champoux (in press), however, suggests that the form of this relationship may depart from linearity at high levels of job scope. In other words, behavioral and attitudinal responses diminish as jobs become broader in scope. More specifically, he found that adding a squared job scope term to the regression of job scope, personality characteristics, and the interaction of job scope and personality on job satisfaction approximates a quadratic response function with a positive linear effect coefficient and a negative curvature effect coefficient. The curvature effect coefficient consistently and significantly increased the explanatory power of the model.

The extent to which a curvilinear relationship characterizes relationships between job scope and employee withdrawal behaviors remains to be investigated. Excessive stimulation by the job at high levels of job scope, however, might result in decreased job satisfaction and increased role stress

and anxiety which are made manifest by withdrawal from the organization. It was hypothesized that the general relationship between job scope and turnover and absenteeism would be negative, with the relationship departing from linearity at high levels of job scope. The curvature effect coefficient (i.e., regression weight of the squared job scope term) was expected to be positive and significant, indicating the relationships between job scope and the withdrawal behaviors would begin to level-off or even become positive at high levels of job scope.

#### METHOD

##### Subjects

Subjects for this study were N = 569 employees working in seven agencies of state and county government in a Midwestern state. The agencies included custodial hospitals and social service and administrative units of government. The sample was largely composed of female employees (81%) working in a variety of health care delivery and clerical jobs. The average age of employees participating in the study was 37 years and average length of tenure was 6.3 years. Most employees had at least some college education.

##### Measures

Perceived Task Characteristics-- Employee perceptions of the characteristics of their task were measured using a 14 item short-form of the Job Diagnostic Survey developed by Hackman and Oldham (1975). The a4 items were summed to form a measure of the overall motivating potential of the job since the simple summation of items has been found to produce essentially similar results as the multiplicative combination of items suggested by the instrument developers. Hackman and Oldham (1975) discussed the psychometric properties of the scale. Coefficient alpha for the combined items was .72.

Employee Need Strengths-- The strength of employee needs for achievement and autonomy were measured using the Manifest Needs Questionnaire developed by Steers and Braunstein (1976). Each need is measured by five items which utilize behaviorally anchored preferences in the work setting. Steers and Braunstein (1976) reported acceptable levels of reliability and convergent and discriminant validity for the scales. The internal consistency for the scales in this study, however, were lower than those reported by the instrument developers. Coefficient alpha was .52 for the need for autonomy and .43 for the need for achievement, compared with .66 and .61 for each need, respectively, reported by Steers and Braunstein (1976). It should be recognized that the internal consistency of instruments designed to measure complex personality traits seldom reaches the levels expected of other measures. In fact, some personality theorists have questioned whether estimates of internal consistency based on classical measurement theory are appropriate for personality measures, while others suggest that statistics such as coefficient alpha be considered a lower-bound estimate of the internal consistency of a personality scale (see Jackson & Paunonen, 1980).

Turnover and Absenteeism Incidents-- Information on employee turnover and absenteeism was collected from agency records approximately one year following the distribution of questionnaires. Only employees who either voluntarily resigned or who remained with the organization were included in the study. Absenteeism incidents were the total number of incidents of absence for each employee during the one year period. Multiple days of absence were counted as one incident if the days were consecutive. Turnover and absenteeism were unrelated in this sample.

### Procedure

Employees participated in the study on a voluntary basis. Questionnaires were distributed to groups of employees during working hours by the researchers. Employees were told that the general purpose of the study was to gain a greater understanding of how employees view their jobs and that it was necessary to get employee names on questionnaires in the event a follow-up study was undertaken. Employees were assured that their completed questionnaires would be held in the strictest confidence. Less than 2% of the respondents failed to comply with the request to provide their name.

### RESULTS

Four separate moderated regression analyses were carried out that incorporated the two dependent variables (turnover and absenteeism incidents) and two need strength measures (need for achievement and autonomy). Each analysis involved the eventual creation of a second-order polynomial response function in which perceived job scope, need strength, the interaction between perceived job scope and need strength, and the squared job scope term were regressed, in that order, on either turnover or absenteeism incidents. The results of these analyses are reported in Table 1.

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Insert Table 1 About Here

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As the results in Table 1 indicate, each of the overall regression analyses were significant, although the percentage of explained variation across the analyses was generally small. The cumulative R's ranged from .179 to .275, with the percentage of explained variance in withdrawal behavior ranging from .032 to .075.

When the contribution of each independent variable entered in the

analyses is examined, several patterns emerged from the results. Perceived job scope was significantly related to both turnover and absenteeism, generally explaining the largest proportion of variance in each dependent variable. The need for achievement was also related to turnover and absenteeism incidents, while the need for autonomy was related to turnover but not absenteeism.

When interaction terms between job scope and employee need strengths were entered into the regression analyses, the results were not entirely as predicted. Regression lines plotting scores one standard deviation above and below the mean of each independent variable are presented in Figures 1, 2, 3, and 4 to assist in the interpretation of the results. The interaction term using either need for achievement (Figure 1) or need for autonomy (Figure 2) did not significantly increase explained variance in turnover. However, the interactions between job scope and the needs for achievement (Figure 3) and autonomy (Figure 4) were significantly related to absenteeism incidents. As expected, the number of absenteeism incidents decreased for employees with a high need for autonomy as job scope increased. In contrast, the highest absenteeism for high need achievers was found on high scope jobs, while absenteeism decreased for low need achievers as job scope increased.

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Insert Figures 1, 2, 3 and 4 About Here

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Finally, the squared job scope terms was significantly related to turnover and absenteeism incidents in all four analyses. The increment to  $R^2$  attributable to the curvilinear term was generally small, ranging from .007 to .018. However, the significance of this term across analyses suggests that the relationship between perceived job scope and turnover and absenteeism was not linear. In all polynomial equations, the linear effect coefficient

for job scope was negative and the curvature effect coefficient was positive.

#### DISCUSSION

The results of this study provide additional empirical information to the growing literature on job design, as well as the literature on employee withdrawal behavior. Although job design theorists have long suggested that the motivating potential of tasks has important implications for employee behavior (cf., Hackman & Oldham, 1976), research examining the impact of task characteristics on job satisfaction has far exceeded studies which have investigated actual behaviors such as turnover and absenteeism. The findings of this study help fill this gap in our knowledge.

The general pattern of results with respect to the influence of job scope on withdrawal behaviors is consistent with previous research. As expected, job scope was significantly related to both turnover and absenteeism. The nature of the task itself has been found in previous research to be a major influence on employee affective reactions at work. Employee affective reactions to the job are a major component of most theoretical models of turnover and absenteeism (Mobley et al., 1979; Steers & Rhodes, 1978) and thus provide a theoretical linkage between task characteristics and turnover and absenteeism. The generally weak direct relationships found between perceived job scope and turnover and absenteeism may be attributable to the failure to take such affective reactions into account in the present study and the failure to consider the numerous situational factors that may constrain an employee from acting on his or her behavioral intentions.

The influence of employee need strengths on turnover and absenteeism is much less clear. The finding that the needs for achievement and autonomy had a small but significant direct influence on turnover is generally consistent

with other recent studies (Bernardin, 1977; Mowday et al., 1978), although other studies have failed to support this relationship (Mowday et al., 1979). The influence of personality characteristics on absenteeism has not been extensively studied but the present results are consistent with the few existing studies which suggest such personal characteristics may influence the propensity to be absent (Bernardin, 1977).

The moderating influence of employee need strengths on the job scope-withdrawal behavior relationships found in the present study adds to the already confusing picture which exists in the literature. The lack of any significant impact of such interactions on turnover is consistent with the recent work of Katerberg et al. (1978) but not Mowday et al. (1979). Moreover, the finding that employee need strengths moderated the job scope-absenteeism relationships is consistent with theory, but not the recent empirical findings of Hackman and Oldham (1976). Finally, the finding that need for achievement moderated the job scope-absenteeism relationship in a direction opposite than predicted is inconsistent with theory but not previous research. Hackman, Pearce and Wolfe (1978), for example, found that absenteeism increased for clerical employees with high growth needs who had their jobs enriched. In addition, Stone, Mowday and Porter (1977) found a significantly stronger relationship between job scope and job satisfaction for employees with a low need for achievement than employees with a high need for achievement. Both of these studies would appear to be inconsistent with the work of Steers and Spencer (1977) who found that employees with a high need for achievement perform better on jobs high in scope than jobs low in scope.

The accumulated evidence on the moderating influence of employee need strengths on the job scope-employee behavior relationship hardly inspires confidence in our understanding of this area. One problem in interpreting the

results of previous research is that investigators have used quite different measures of employee personality characteristics, although contradictory results have also been found when the same instrument has been used. Greater consistency in the personality constructs and measures used in future investigations may help overcome, but not eliminate entirely, the problems involved in interpreting previous research. Future research and theory may also need to reconsider the role of employee withdrawal behaviors in organizations. Our tendency in the past has been to consider both turnover and absenteeism as negative influences on organizational effectiveness. As Staw and Oldham (1978) have suggested, however, such a narrow view may have caused us to overlook the role of organizational withdrawal from an employee perspective. It is possible, for example, that absenteeism provides a mechanism for employees to cope with the increasing pressures associated with high scope jobs or for employees with growth needs to adapt to less challenging work. Clarification of the theoretical role of withdrawal behaviors in organizations may be a necessary step in developing a greater understanding of how these behaviors relate to both task characteristics and employee need strengths.

The finding that the squared job scope term added a small but significant portion of the variance in both turnover and absenteeism replicates the earlier findings of Champoux (in press) who studied job satisfaction. The implication of this finding is that the benefits to be derived in terms of reduced absenteeism and turnover from increasing the motivating potential of the job may increase at a decreasing rate. In other words, the marginal benefit of increasing the scope of jobs decreases at high levels of job scope and may disappear entirely at extreme levels of job scope. Additional research on a variety of jobs and occupations will be necessary before the nature of this curvilinear relationship is fully understood.

## FOOTNOTE

Support for this study was provided by the Office of Naval Research, Contract N00014-76-C-0164, NR 170-182. Request for reprints should be sent to Richard T. Mowday, Graduate School of Management, University of Oregon, Eugene, Oregon 97403.

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Table 1

## Moderated Regression Analyses

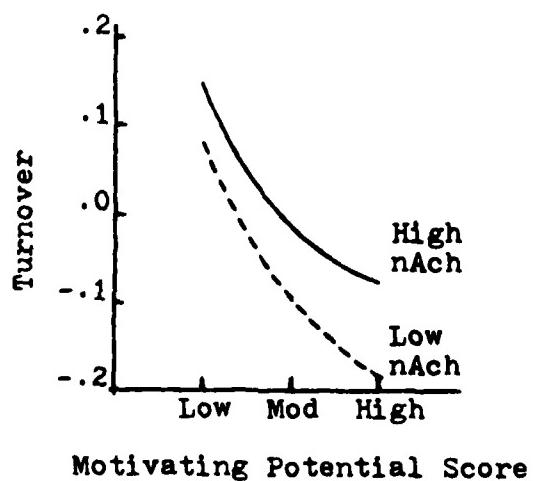
Turnover									
Need for Autonomy									
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			R	R <sup>2</sup>	F	R	R <sup>2</sup>	F	
<i>Need for Achievement</i>									
Job scope	.112 **	.013	.013		7.15 **	.135 **	.018	.018	10.29 **
Personality	.147 **	.022	.009		5.09 **	.182 **	.033	.015	8.58 **
Job scope X personality	.153 **	.024	.002		1.06	.188 **	.035	.002	1.18
Job scope <sup>2</sup>	.179 **	.032	.009		4.97 **	.207 **	.043	.007	4.23 **
<i>Absenteeism Incidents</i>									
<i>Need for Autonomy</i>									
Variable entered	R	R <sup>2</sup>	Cumulative Increment		Incremental		Cumulative Increment		Incremental F
			R	R <sup>2</sup>	F	R	R <sup>2</sup>	F	
Job scope	.143 **	.021	.021		11.67 **	.143 **	.021	.021	11.67 **
Personality	.171 **	.029	.009		4.94 *	.156 **	.024	.004	2.14
Job scope X personality	.222 **	.049	.020		11.90 **	.247 **	.061	.037	21.78 **
Job scope <sup>2</sup>	.260 **	.068	.018		10.91 **	.275 **	.075	.014	8.60 **

Note. Sample sizes range across analyses from 555 to 560 due to missing responses

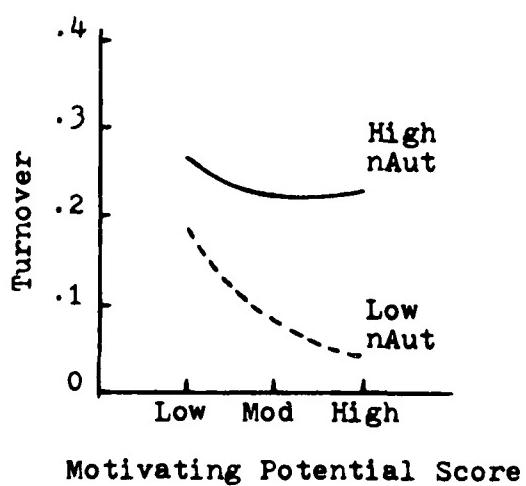
\* P < .05

\*\* P < .01

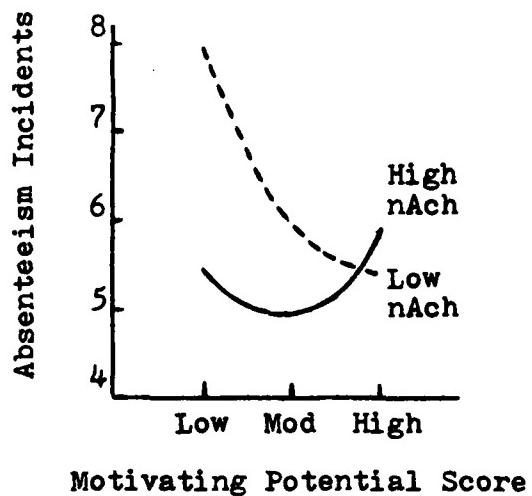
Figure 1  
Relationship between Motivating Potential Score,  
Need for Achievement, and Turnover



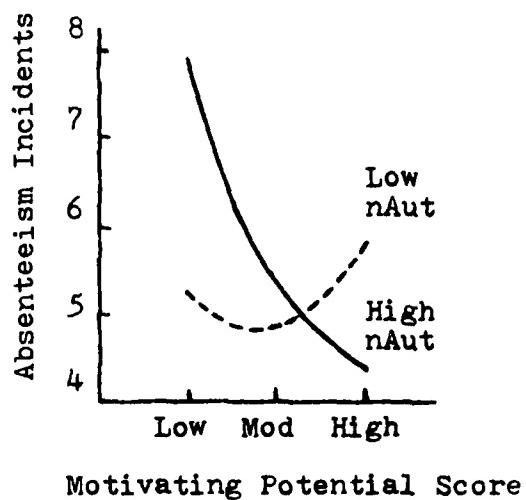
**Figure 2**  
Relationship between Motivating Potential Score,  
Need for Autonomy, and Turnover



**Figure 3**  
**Relationship between Motivating Potential Score,**  
**Need for Achievement, and Absenteeism Incidents**



**Figure 4**  
Relationship between Motivating Potential Score,  
Need for Autonomy, and Absenteeism Incidents



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